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10/579,628	05/17/2006	Yibo Zhang	2006_0718A	9174

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>17 May 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-14</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-14</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>17 May 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All b)☐ Some * c)☐ None of:

　　　　1.☒ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date <u>5/17/2006</u>.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Priority

1.   Applicant's claim for benefit of foreign priority under 35 U.S.C. 119 (a) – (d) is

acknowledged.

      The application is a 371 case of PCT/JP05/07096 application filed on 4/12/2005

and has a foreign priority application filed on 4/15/2004.

      .

Claim Rejections - 35 USC § 102

      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1, 3, 5 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated

by Kimura (U.S. Patent 2001/0048744).

      As per claim 1 and 13, Kimura teaches a communication device requested for

authentication for connection from another communication device, the communication

device comprising:

      a receiving section for receiving, from the another communication device, an

authentication request including device information capable of uniquely specifying the

another communication device (Kimura: Para [0056] and Para [0006]: the access point device allows the network-administering user to see / view who is making the request before granting authorization, instead of transparently using automatic authorization);

a display section for displaying the device information included in the authentication request on a screen thereof (Kimura: Para [0032] and [0056]);

an input section for receiving an input instruction determined by a user based on the screen of the display section (Kimura: Para [0032]: The authentication input means realize the function of accepting button or other physical human inputs so as to notify the authentication/association processing means whether or not the user who administers the wireless area network grants authorization or rejection after the presence of the authentication-requesting mobile station is notified by the authentication request display means); and

an authentication section for executing processing of verifying or not verifying the authentication with the another communication device in accordance with the instruction input to the input section (Kimura: Para [0032]).

As per claim 3, Kimura teaches the display section simultaneously displays a plurality of pieces of device information included in the plurality of authentication requests (Kimura: Para [0032] and [0056] & Figure 1: for mobile stations $MT_1 - MT_4$ and it is an open network connection which is not restricted to 1-1 only, point-to-point communication).

As per claim 5, Kimura teaches when there is no instruction from the user to the

input section within a predetermined time period, the authentication section executes

processing of not verifying the authentication of the another communication device

(Kimura: Para [0052] Line 5 – 10: a time-out count).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
are such that the subject matter as a whole would have been obvious at the time the invention was made to
a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
negatived by the manner in which the invention was made.

3.   Claims 2, 4, 6, 8, 10 – 12 and 14 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kang et al. (U.S. Patent 7,096,352), in view of Kimura (U.S. Patent

2001/0048744).

As per claim 2 and 12, kang teaches a communication device requesting another

communication device for authentication for connection, the communication device

comprising:

a transmission section for transmitting an authentication request including device

information capable of uniquely specifying the communication device to the another

communication device (Kang: Column 3 Line 1 – 20: the "random" value data field @

CilentHello message, that makes authentication request, uniquely identify a particular

requesting device);

a receiving section for receiving an authentication response including device information corresponding to the authentication request from the another communication device (Kang: Column 3 Line 18 – 27 and Column 1 Line 49 – 51: the receiving device generates a specific server random value, that uniquely identify a particular response device, in response to the received random valued from the sending device, on a mutual authentication basis to prove that both devices indeed computes the same security parameters).

However, Kang does not disclose expressly a display section for displaying the device information included in the authentication response on a screen.

Kimura teaches a display section for displaying the device information included in the authentication response on a screen thereof (Kang: Column 3 Line 18 – 27 and Column 1 Line 49 – 51) & (Kimura: Para [0056] and Para [0006]: (a) the access point device allows the user to see / view who is making the request before granting authorization, instead of transparently using automatic authorization (b) though the message is an authentication response message from the server; however, in fact, this message is also an authentication request message in correspondence with "mutual authentication" that requires the receiver authentication to the sender device).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Kimura within the system of Kang because (a) Kang teaches a mutual authentication (co-equal) mechanism between a sender and a receiver (i.e. a client and the server) and allowing a challenge request of receiver authentication to the sender (Kang: Column 2 Line 64 – 65, Column 2 Line 60 –

62 and Column 1 Line 49 – 51) and (b) Kimura teaches a method that can provide a

significantly improvement of security level by allowing the user to see / view who is

making the request before granting authorization, instead of transparently using

automatic authorization (Kimura: Para [0056] Last sentence).

an input section for receiving an input instruction determined by a user based on

the screen of the display section (Kimura: Para [0032]: The authentication input means

realize the function of accepting button or other physical human inputs so as to notify

the authentication/association processing means whether or not the user who manages

the wireless area network grants authorization or rejection after the presence of the

authentication-requesting mobile station is notified by the authentication request display

means); and

an authentication section for executing processing of verifying or not verifying the

authentication with the another communication device in accordance with the instruction

input to the input section (Kimura: Para [0032]).

As per claim 11, the claim limitations are met as the same reasons as that set

forth in the paragraph above in rejecting the claims 1 and 2.

As per claim 14, the claim limitations are met as the same reasons as that set

forth in the paragraph above in rejecting the claims 1 and 2.

As per claim 4, Kang as modified teaches the display section simultaneously displays a plurality of pieces of device information included in the plurality of authentication responses (Kimura: Figure 1, Para [0032] and [0056]: It is an open network connection which is not restricted to 1-1 only, point-to-point communication).

As per claim 6, Kang as modified teaches when there is no instruction from the user to the input section within a predetermined time period, the authentication section executes processing of not verifying the authentication of the another communication device (Kimura: Para [0052] Line 5 – 10: a time-out count).

As per claim 8, Kang as modified teaches the device information includes an identification number and at least one of a public key and an electronic signature of the communication device (Kang: Column 4 Line 35 – 40: a user password and a public key are required).

As per claim 10, Kang as modified teaches the authentication section generates a common encryption key using the identification number included in the authentication response received from the another communication device (Kang: Column 3 Line 43 – 50: a shared session key is generated between the client / server by using a key block information that includes the device information).

4.   Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (U.S. Patent 2001/0048744) and Kang et al. (U.S. Patent 7,096,352).

As per claim 7, Kimura does not teach expressly the device information includes an identification number and at least one of a public key and an electronic signature of the communication device.

Kang teaches the device information includes an identification number and at least one of a public key and an electronic signature of the communication device (Kang: Column 4 Line 35 – 40: a user password and a public key are required).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Kang within the system of Kimura because (a) (b) Kimura teaches a method that can provide a significantly improvement of security level by allowing the user to see / view who is making the request before granting authorization, instead of transparently using automatic authorization (Kimura: Para [0056] Last sentence) and (b) Kang teaches an enhanced security mechanism by additionally using a mutual authentication (co-equal) mechanism between a sender and a receiver (i.e. a client and the server) and allowing a challenge request of receiver authentication to the sender (Kang: Column 2 Line 64 – 65, Column 2 Line 60 – 62 and Column 1 Line 49 – 51).

As per claim 9, Kimura as modified teaches the authentication section generates a common encryption key using the identification number included in the authentication response received from the another communication device (Kang: Column 3 Line 43 – 50: a shared session key is generated between the client / server by using a key block information that contains the device information).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LONGBIT CHAI whose telephone number is (571)272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Longbit Chai/

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09/30/2008